

Page 1 of 9 Appl. No.: 10/735,972 Response to Notice to File Corrected Application Papers Replacement Sheet

Figure 1

Figure 2

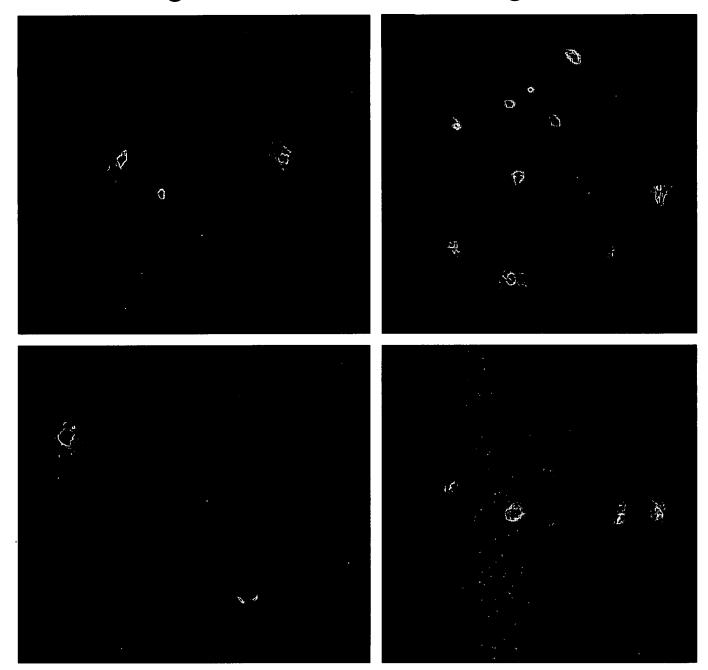


Figure 3

Figure 4

Page 2 of 9 Appl. No.: 10/735,972 Response to Notice to File Corrected Application Papers Replacement Sheet

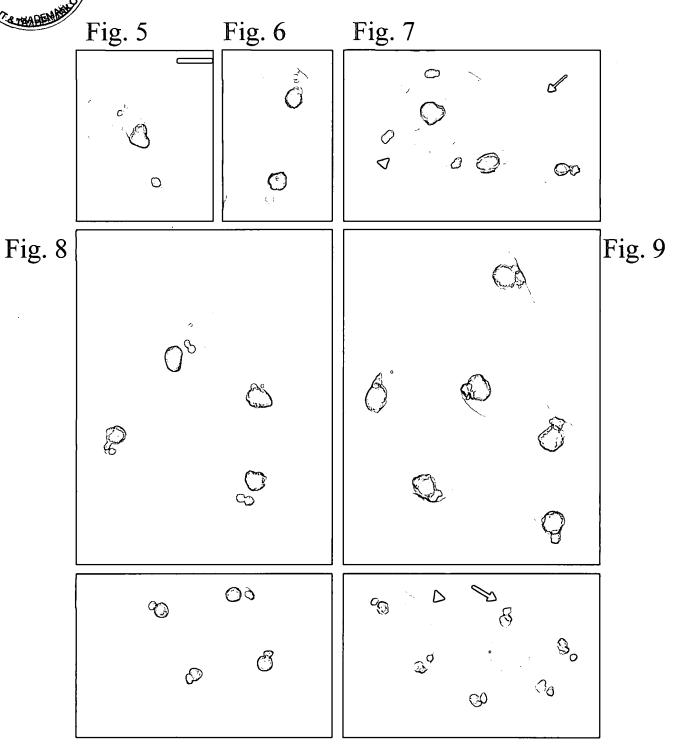


Fig. 10

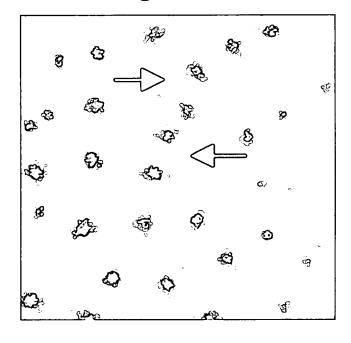
Fig. 11

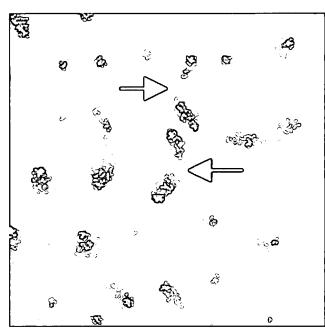


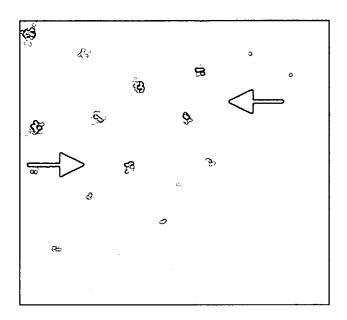
Page 3 of 9 Appl. No.: 10/735,972 Response to Notice to File Corrected Application Papers Replacement Sheet

Figure 12

Figure 13







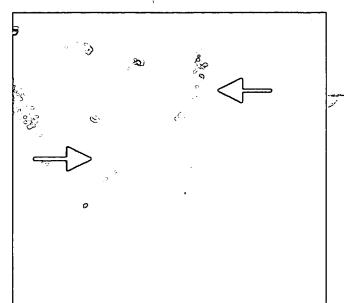


Figure 14

Figure 15



Page 4 of 9 Appl. No.: 10/735,972 Response to Notice to File Corrected Application Papers Replacement Sheet

Figure 16

SEQ ID NO:1 KIF18A cDNA GenBank Accession No. AL136819

```
1 atgtctgtca ctgaggaaga cctgtgccac catatgaaag tagtagttcg tgtacqtccq
  61 gaaaacacta aagaaaaagc agctggattt cataaagtgg ttcatgttgt ggataaacat
 121 atcctagttt ttgatcccaa acaagaagaa gtcagttttt tccatggaaa gaaaactaca
 181 aatcaaaatg ttataaagaa acaaaataag gatcttaaat ttgtatttga tgctgtttt
 241 gatgaaacgt caactcagtc agaagttttt gaacacacta ctaagccaat tcttcgtagt
 301 tttttgaatg gatataattg cacagtactt gcctatggtg ccactggtgc tgggaagacc
 361 cacactatgc taggatcagc tgatgaacct ggagtgatgt atctaacaat gttacacctt
 421 tacaaatgca tggatgagat taaagaagag aaaatatgta gtactgcagt ttcatatctg
 481 gaggtatata atgaacagat tcgtgatctc ttagtaaatt cagggccact tgctgtccgg
 541 gaagataccc aaaaaggggt ggtcgttcat ggacttactt tacaccagcc caaatcctca
 601 gaagaaattt tacatttatt ggataatgga aacaaaaaca ggacacaaca tcccactqat
 661 atgaatgcca catcttctcg ttctcatgct gttttccaaa tttacttgcg acaacaagac
 721 aaaacagcaa gtatcaatca aaatgtccgt attgccaaga tgtcactcat tgacctggca
 781 ggatctgagc gagcaagtac ttccggtgct aaggggaccc gatttgtaga aggcacaaat
 841 attaatagat cacttttagc tcttgggaat gtcatcaatg ccttagcaga ttcaaagaga
 901 aagaatcagc atatecetta cagaaatagt aagettaete gettgttaaa qqattetett
 961 ggaggaaact gtcaaactat aatgatagct gctgttagtc cttcctctgt attctacgat
1021 gacacatata acactettaa gtatgetaac egggeaaagg acattaaate ttetttgaaq
1081 agcaatgttc ttaatgtcaa taatcatata actcaatatg taaagatctg taatgagcag
1141 aaggcagaga ttttattgtt aaaagaaaaa ctaaaagcct atgaagaaca qaaaqccttc
1201 actaatgaaa atgaccaagc aaagttaatg atttcaaacc ctcaggaaaa agaaatcgaa
1261 aggtttcaag aaatcctgaa ctgcttgttc cagaatcgag aagaaattag acaagaatat
1321 ctgaagttgg aaatgttact taaagaaaat gaacttaaat cattctacca acaacagtgc
1381 cataaacaaa tagaaatgat gtgttctgaa gacaaagtag aaaaggccac tggaaaacga
1441 gatcatagac ttgcaatgtt gaaaactcgt cgctcctacc tggagaaaag gagggaggag
1501 gaattgaagc aatttgatga gaatactaat tggctccatc gtgtcgaaaa agaaatggga
1561 ctcttaagtc aaaacggtca tattccaaag gaactcaaga aagatcttca ttgtcaccat
1621 ttgcacctcc agaacaaaga tttgaaagca caaattagac atatgatgga tctagcttqt
1681 cttcaggaac agcaacacag gcagactgaa gcagtattga atgctttact tccaacccta
1741 agaaaacaat attgcacatt aaaagaagcc ggcctgtcaa atqctqcttt tqaatctqac
1801 ttcaaagaga tcgaacattt ggtagagagg aaaaaagtgg tagtttgggc tqaccaaact
1861 gccgaacaac caaagcaaaa cgatctacca gggatttctg ttcttatgac ctttccacaa
1921 cttggaccag ttcagcctat tccttgttgc tcatcttcag gtggaactaa tctggttaag
1981 attoctacag aaaaaagaac toggagaaaa ctaatgocat otocottgaa aggacagcat
2041 actctaaagt ctccaccatc tcaaagtgtg cagctcaatg attctcttag caaagaactt
2101 cagcetattg tatatacace agaagactgt agaaaagett tteaaaatce qtetacaqta
2161 accttaatga aaccatcatc atttactaca agttttcagg ctatcagctc aaacataaac
2281 tgtggacagg aggacttgga ctctacattt actatatgtg aagacatcaa gagctcgaag
2341 tgtaaattac ccgaacaaga atcactacca aatgataaca aagacatttt acaacggctt
2401 gateettett catteteaac taageattet atgeetgtae caageatggt gecateetae
2461 atggcaatga ctactgctgc caaaaggaaa cggaaattaa caagttctac atcaaacagt
2521 tcgttaactg cagacgtaaa ttctggattt gccaaacgtg ttcgacaaga taattcaagt
2581 gagaagcact tacaagaaaa caaaccaaca atggaacata aaagaaacat ctqtaaaata
2641 aatccaagca tggttagaaa atttggaaga aatatttcaa aaggaaatct aagataa
```



Page 5 of 9
Appl. No.: 10/735,972
Response to Notice to File Corrected Application Papers
Replacement Sheet

Figure 17

SEQ ID NO:2 Amino acid sequence of KIF18A GenBank Accession No. AL136819

MSVTEEDLCHHMKVVVRVRPENTKEKAAGFHKVVHVVDKHILVFDPKQEEVSF FHGKKTTNQNVIKKQNKDLKFVFDAVFDETSTQSEVFEHTTKPILRSFLNGYNCT VLAYGATGAGKTHTMLGSADEPGVMYLTMLHLYKCMDEIKEEKICSTAVSYLE VYNEQIRDLLVNSGPLAVREDTQKGVVVHGLTLHQPKSSEEILHLLDNGNKNRT QHPTDMNATSSRSHAVFQIYLRQQDKTASINQNVRIAKMSLIDLAGSERASTSGA KGTRFVEGTNINRSLLALGNVINALADSKRKNQHIPYRNSKLTRLLKDSLGGNCQ TIMIAAVSPSSVFYDDTYNTLKYANRAKDIKSSLKSNVLNVNNHITQYVKICNEQ KAEILLLKEKLKAYEEQKAFTNENDQAKLMISNPQEKEIERFQEILNCLFQNREEI RQEYLKLEMLLKENELKSFYQQQCHKQIEMMCSEDKVEKATGKRDHRLAMLKT RRSYLEKRREEELKQFDENTNWLHRVEKEMGLLSQNGHIPKELKKDLHCHHLHL QNKDLKAQIRHMMDLACLQEQQHRQTEAVLNALLPTLRKQYCTLKEAGLSNAA FESDFKEIEHLVERKKVVVWADQTAEQPKQNDLPGISVLMTFPQLGPVQPIPCCS SSGGTNLVKIPTEKRTRRKLMPSPLKGQHTLKSPPSQSVQLNDSLSKELQPIVYTP EDCRKAFQNPSTVTLMKPSSFTTSFQAISSNINSDNCLKMLCEVAIPHNRRKECGO EDLDSTFTICEDIKSSKCKLPEQESLPNDNKDILQRLDPSSFSTKHSMPVPSMVPSY MAMTTAAKRKRKLTSSTSNSSLTADVNSGFAKRVRODNSSEKHLQENKPTMEH KRNICKINPSMVRKFGRNISKGNLR



Page 6 of 9 Appl. No.: 10/735,972 Response to Notice to File Corrected Application Papers Replacement Sheet

Figure 18

SEQ ID NO:3 Amino acid sequence of KLP67A GenBank Accession No. NM_079268

MPSEQHTNIKVAVRVRPYNVRELEQKQRSIIKVMDRSALLFDPDEEDDEFFFQGA KQPYRDITKRMNKKLTMEFDRVFDIDNSNQDLFEECTAPLVDAVLNGYNCSVFV YGATGAGKTFTMLGSEAHPGLTYLTMQDLFDKIQAQSDVRKFDVGVSYLEVYN EHVMNLLTKSGPLKLREDNNGVVVSGLCLTPIYSAEELLRMLMLGNSHRTQHPT DANAESSRSHAIFQVHIRITERKTDTKRTVKLSMIDLAGSERAASTKGIGVRFKEG ASINKSLLALGNCINKLADGLKHIPYRDSNLTRILKDSLGGNCRTLMVANVSMSS LTYEDTYNTLKYASRAKKIRTTLKQNVLKSKMPTEFYVKKIDEVVAENERLKER NKALEAKATQLERAGNSGFDPLELKTWYSKIDAVYAAARQLQEHVLGMRSKIK NINYRQTLKKELEEFRKLMCVDQRVCQEDFRRFANYMSTLTSQMEKYKEELPS WLSKMEIAYODLESLKREVNKSKAYQILIVYVKYKDLELQLTKQNIFNNHVNAI NQELVENLDLMRKSFRTACEVLNQTYDRLEDGQKLTPEIEAVFERLLRKMRFAD SEANTKMAEMNPLAVPVALRSSAQEEEEPTCSLTASAKKRQRQAAQSDDDLHLS MEDFDSQDTESDSEELHRTFKRPRNLNETQVLGPCSSSSSSSSSSSSSSARKALTAT VTKPRTVQQRLVSDLISDQNVRGGNEKIKKALLKSNHFTAQGLQRTLAAASLAK ENVKYNANYVRKSPRALMAKALAGTSTLARKPLGSASKEPPLVKFNRAASFRLK K

MAY 17 2007 W

Page 7 of 9 Appl. No.: 10/735,972

Response to Notice to File Corrected Application Papers
Replacement Sheet

Figure 19

SEQ ID NO:4 cDNA of KLP67A GenBank Accession No. NM_079268

1 atgccttcgg aacagcatac gaatataaaa gtggcggttc gcgtacggcc gtataatgtc 61 cgtgaattgg agcaaaaaca gcggagtatt atcaaggtca tggatcgttc ggcactgctg 121 ttcgatcccg acgaggagga cgatgagttc ttctttcagg gcgccaagca accgtaccgc 181 gacatcacca ageggatgaa caaaaagttg accatggaat tegacagggt attegatata 241 gacaattcca accaggatct gttcgaggag tgcacggcgc cgctggtcga cgcggtgtta 301 aatggataca actgctcggt atttgtatat ggagccactg gcgccggaaa aacattcaca 361 atgetgggca gegaggetea teegggtetg acetatetta eeatgeaaga tetettegat 421 aagatccaag cgcagagcga cgtgcgcaag ttcgatgtgg gggtatccta tctagaggtg 481 tacaacgaac atgtgatgaa tctgctaact aaatcgggcc ctttaaaact tcgcgaggac 541 aacaatggcg tggtggtcag tggtctttgt ctcacgccca tctacagtgc cgaggagctg 601 ctaagaatgc tgatgctggg caactctcat cgcactcagc accccacaga tgccaatgca 661 gagagttcca ggtcacatgc catcttccag gtgcacatta ggatcacgga gcgcaagacc 721 gacaccaaaa gaacggtcaa actatccatg atcgatctgg cgggcagtga gagggcggcc 781 agtacgaaag gcattggagt gcgattcaag gaaggcgcca gcatcaacaa aagtctctta 841 gctttgggaa attgcataaa caagctagcc gacggcttaa agcacatccc gtaccgcgac 901 tegaacetga caegeateet gaaggaeteg ttgggeggaa attgtegeae attgatggtg 961 gccaatgtct cgatgagctc actgacctat gaagatacct acaacaccct taagtacgct 1021 agccgagcta agaagatacg cacgactetg aaacagaatg teetcaagte caagatgeca 1081 accgagttct atgtgaagaa gatcgacgag gtggtagccg agaacgagcg actcaaagag 1141 cgcaacaagg cgctggaggc caaggccact cagttggagc gcgccggcaa tagtggattc 1201 gatccgctgg agettaagac gtggtacage aagatagacg ctgtatatgc ggccgcccgg 1261 cagetteagg ageaegteet tggtatgegt ageaagatea agaacateaa etaeeggeag 1321 acactgaaaa aagaactgga ggagttcagg aagctgatgt gtgtcgacca gcgagtgtgc 1381 caggaggact teegtegett tgegaactae atgageaeae tgaceageea gatggagaag 1441 tacaaggagg agttgcccag ctggctgagt aaaatggaga ttgcctacca ggatctagaa 1501 agtetaaage gagaggttaa caaateaaag geetaeeaga taeteattgt ataegttaag 1561 tacaaggate tegagetgea getgaceaag eagaatatet ttaacaatea egtgaaegea 1621 attaaccagg agctggttga gaacttggat ctgatgcgaa agtccttccg aacagcctgc 1681 gaagtgetea accagaegta egategeete gaggatggte aaaagetgae geeggaaatt 1741 gaggcggtct tcgaaaggtt gctgcgaaag atgcggttcg ccgattccga ggccaatacc 1801 aaaatggccg agatgaatcc gttggcggtg cctgtggctc tgcgcagcag cgcccaggag 1861 gaagaagagc ccacatgcag cctcacggcc agcgccaaaa agcgacaaag gcaagcggct 1921 cagagegaeg aegatetgea tttgageatg gaggaetttg atageeagga cacegaatea 1981 gattccgagg agctgcacag gacgtttaag aggccacgaa atctaaacga aacgcaggtc 2041 etgggteet geageagtag ttetageage agtaetteta geageagtag egeaaggaag 2101 gcactcacgg cgacggtgac caagccgcga accgtccaac agcgactggt cagcgatctg 2161 atatecgate agaatgtgeg eggtggeaat gaaaagatea agaaggetet acteaagteg 2221 aatcacttta cggcgcaagg acttcagaga acgttggcgg ctgcttctct ggccaaggaa 2281 aacgtaaaat acaacgccaa ctatgtgcgc aagagtccac gagcgctaat ggccaaagcc 2341 cttgcaggca cctcgacgct tgcgagaaaa ccgctgggat cggccagtaa ggagccgcct 2401 ttggtcaaat tcaatcgtgc tgcttcgttc cgcctgaaga agtag



Page 8 of 9
Appl. No.: 10/735,972
Response to Notice to File Corrected Application Papers
Replacement Sheet

Figure 20

KLP61F dsRNA (SEQ ID NO:13)

gacgggcaca gggaagaccc acaccatggt gggcaacgag actgccgaac
tgaaatcctc ctgggaagat gactctgaca ttggcatcat accgcgcgct ctgagtcacc
ttttcgatga gctgcgcatg atggaggtgg agtacactat gcgcatttcc tacttggaac
tgtacaatga ggagctgtgc gatctactgt ccaccgatga caccaccaag atacgcattt
tcgatgacag caccaagaag ggatcggtga ttatccaggg cctggaggag ataccagtgc
acagcaagga tgatgtgtac aagctgctgg agaagggaaa ggagcgtcgc aaaacagcca
ctacgctgat gaatgcacag tcctcacgct cccacactgt attttctata gttgtgcaca
tcagggagaa tggcatcgaa ggagaggaca tgctgaaaat cggtaaactg aatctggtgg
atctggcggg cagtgaaaat gtttccaagg ctgggaatga aaaggga



Page 9 of 9
Appl. No.: 10/735,972
Response to Notice to File Corrected Application Papers
Replacement Sheet

Figure 21

KLP67A dsRNA (SEQ ID NO:14)

gtacggc cgtataatgt ccgtgaattg gagcaaaaac agcggagtat
tatcaaggtc atggatcgtt cggcactgct gttcgatccc gacgaggagg acgatgagtt
cttctttcag ggcgccaagc aaccgtaccg cgacatcacc aagcggatga acaaaaagtt
gaccatggaa ttcgacaggg tattcgatat agacaattcc aaccaggatc tgttcgagga
gtgcacggcg ccgctggtcg acgcggtgtt aaatggatac aactgctcgg tatttgtata
tggagccact ggcgccggaa aaacattcac aatgctgggc agcgaggctc atccgggtct
gacctatctt accatgcaag atctcttcga taagatccaa gcgcagagcg acgtgcgcaa
gttcgatgtg ggggtatcct atctagaggt gtacaacgaa catgtgatga atctgctaac
taaatcgggc cctttaaaac ttcgcgagga caacaatggc gtggtggtca gtgg